



RESOURCES



www.solaroregon.org



www.oregon.gov/ENERGY
1-800-221-8035



www.energytrust.org
1-866-368-7878



www.portlandonline.com/osd/solar
503-823-7109

The Solar Now! campaign sponsors—Solar Oregon, Oregon Department of Energy, Energy Trust of Oregon and City of Portland Bureau of Planning and Sustainability—do not install solar energy systems or equipment. This work is done by independent businesses that are solely responsible for the quality and performance of their installations. Energy Trust of Oregon provides financial incentives and quality assurance. Oregon Department of Energy provides tax credits. City of Portland Bureau of Planning and Sustainability provides Portland residents with customer service, information and resources. Solar Oregon provides solar workshops, tours and education.

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1-877-546-8769
www.SolarNowOregon.org

Solar—a business energy solution whose time is now

DOES OREGON RECEIVE ENOUGH SUN?

Oregon gets as much sun as the national average—and more than Germany, the world's solar energy leader. The solar resource in southern and eastern Oregon is 20 to 30 percent higher than the national average.

WHAT SIZE SYSTEM DO I NEED?

The physical area needed for solar installations depends on the building's energy needs. For solar electric, plan on 100 square feet for one kilowatt of solar panels, which will generate 1,000 kilowatt hours per year in the Willamette Valley. Solar electric systems can be scaled to meet a desired portion of your electric load. Solar water heating systems are sized to meet 50 to 70 percent of your hot water load, and may need anywhere from 80 to 800 square feet of roof area for the collectors. Solar pool heating systems typically have a collector area of 50 to 100 percent of the pool's surface area.

ARE SOLAR ENERGY SYSTEMS LOW MAINTENANCE?

Today's solar energy systems have few moving parts and can operate silently and dependably with warranties of up to 25 years. The systems run automatically and efficiently with electronic controllers. Meters and gauges allow maintenance staff to verify system operation and performance.

WILL SOLAR WORK ON MY ROOF?

Solar works best on roofs with southern exposure, though east or west orientation roofs may be suitable as well. For optimum performance, there should be little or no shading on the system from adjacent trees or buildings. Remember, locations with no shading in the winter may be shaded by spring and summer foliage. Solar energy systems can be installed in a number of ways, on many styles of roofs or on the ground. Work with your contractor to decide what works for your facility and to determine that your planned installation meets local building codes.

WHAT IF I CAN'T USE THE TAX CREDITS?

If you want to own the system yourself but don't have Oregon tax liability, you can talk with Oregon Department of Energy about their tax credit pass-through program. This option allows a project owner to transfer their Business Energy Tax Credit project eligibility to a pass-through partner for a lump-sum cash payment. Consult with your tax adviser for more information. A third-party ownership model may allow your organization to host a solar energy system that is installed, owned and operated by another company. Your building would use the solar energy delivered to you under contract with the third party.



SOLAR NOW!

GOOD ENERGY for OREGONIANS

SOLAR ENERGY IN OREGON: Businesses take power into their own hands

Tap into clean, green, renewable energy with a solar electric, solar water heating or solar pool heating system for your business. Across the state, companies like yours are investing in energy efficiency and installing their own renewable solar energy systems. It's a common sense way to manage costs and lighten your impact on the environment.

A solar energy system owned by your business can:

- Hedge against rising energy prices
- Provide a great return on investment
- Reduce operating costs
- Qualify for financial incentives
- Demonstrate environmental leadership in the community
- Help achieve green building ratings such as LEED® and ENERGY STAR®

Solar Now! makes it easy to go solar

Four Oregon organizations have teamed up to help Oregon businesses learn about and install solar energy systems. **Solar Oregon** and **Energy Trust of Oregon**—both nonprofits—are working with **City of Portland Bureau of Planning and Sustainability** and **Oregon Department of Energy** to offer you information on:

- Learning more and getting started
- Qualified contractors
- Energy Trust incentives
- State and federal tax incentives

The Solar Now! campaign connects Oregonians with the resources and assistance they need to choose solar energy. Solar Now! is brought to you by Solar Oregon, City of Portland Bureau of Planning and Sustainability, Energy Trust of Oregon and Oregon Department of Energy.

Mt. Hood Athletic Club, Sandy

Mt. Hood Athletic Club owners Paul and Lila Reed installed a solar pool heating system to warm the Sandy club's outdoor pool, which operates May through August. The system cost just over \$16,000 to install and is saving approximately \$2,000 in natural gas charges each year. The savings will increase as energy costs rise. With a \$2,658 Energy Trust incentive, plus energy cost savings and an Oregon Business Energy Tax Credit, the club expects to recover its investment in just a few years.

"I'm a business man first and foremost. Anything with a five-year return or better is a no-brainer. Energy costs just keep going up, so the more independent you are from those costs, the more viable you are in the long run."

Paul Reed, owner
Mt. Hood Athletic Club



Solar meets the energy needs of Oregon businesses

SOLAR ELECTRIC

Convert Oregon sunshine into electricity and reduce your electric costs. With a solar electric system, any power generated in excess of your use is credited to your account as it passes through your meter into the power grid. Systems are flexible and modular and can be sized (and expanded) to meet any percentage of your building’s energy needs, whether it’s a small office or large industrial facility.

Many businesses find solar panels to be attractive to their customers and a meaningful showcase of their environmental commitment. If you’d rather have your system less visible, panels can be integrated into the building and surrounding spaces. Other installation options may include integrated roofing systems, glazing, sunshades and covered parking structures.

SOLAR WATER HEATING

If your business uses a lot of hot water, your most cost-effective solar option may be solar water heating. A solar water heating system preheats water for tank, tankless or boiler systems and works for both electric and natural gas customers. Motels and hotels, hospitals and medical facilities, assisted-living communities, recreation centers and laundries can gain big savings with a solar water heating system.

SOLAR POOL HEATING

An outdoor swimming pool is a great place to take advantage of the sun’s power. Your pool’s filter pump diverts water to solar collectors, which directly heat water for your pool. Solar pool heating systems can reduce natural gas consumption for your pool heater by 50 to 70 percent and earn a payback on investment in just two to five years.

Investing in any solar energy system is more than just a tangible commitment to energy savings and the environment. Incorporating solar energy technologies into your facility may contribute to third-party green building certifications, such as LEED.

Energy efficiency is the first best step for energy management

Improving the energy efficiency of your facility is the most effective way to manage energy costs and reduce carbon emissions from your operations. Upgrading lighting, HVAC and other mechanical systems, and installing high-efficiency equipment and appliances can pay back through energy savings in just three to five years. Energy Trust incentives and Oregon energy tax credits are available to improve your return on investment even further. Check with your contractor, Energy Trust or Oregon Department of Energy for more information.



Vernier Software, Beaverton

Vernier Software updated their Beaverton headquarters with efficiency improvements that save the company 152,000 kilowatt hours of electricity and 7,100 therms of natural gas each year and earned a LEED-EB (Existing Buildings) certification from the U.S. Green Building Council. A 17-kilowatt solar electric system tops off this high-performance building by generating about 19,000 kilowatt hours each year.

“Having an eco-friendly business is important to our company, so it made sense for us to make our facility as energy efficient as possible. Our solar array is doing more than generating clean energy for our company. By making our system data available on our Web site, www.vernier.com/solar, we are encouraging the community to learn about solar energy.”

David Vernier, owner, Vernier Software

Questions? Call **1-877-546-8769** or go to **www.SolarNowOregon.org**.

Tax credits and incentives

CASH INCENTIVES AND TAX CREDITS CAN COVER UP TO 85 PERCENT OF THE COST

With Oregon’s great solar potential and financial incentives, businesses can invest in an affordable solar option that will pay dividends for years to come. Consult your tax professional to learn how federal and state tax credits and rules apply to your project. Information below does not constitute tax advice and cannot be used to avoid tax penalties.

| | SOLAR ELECTRIC | SOLAR WATER HEATING | SOLAR POOL HEATING |
|-------------------------|---|--|--|
| Energy Trust Incentives | \$0.90 to \$1.75/watt (\$0.25 higher for non-profits), maximum 200 kW Incentive varies with rated capacity of the photovoltaic array and electric utility serving the site. Additional rates for larger projects available on Web site (below). | \$6.00/therm or \$0.40/kWh Incentive is based on calculated annual energy saved by solar water heating system, and utility that serves the water heating load. | \$1.50/therm or \$0.10/kWh Incentive is based on calculated annual energy saved by solar pool heating system, and utility that serves the pool heating load. |
| Tax Incentives | Oregon: Business Energy Tax Credit of 50 percent of maximum eligible cost, claimed over five years (10 percent per year). Pass-through option may be available for those who wish to receive payment up front, or cannot take advantage of a tax credit directly. For eligible project costs of \$20,000 or less, tax credit may be taken in one year. | | |
| | Oregon: Five-year accelerated depreciation. | | Not available for pools. |
| | Federal: Investment Tax Credit of 30 percent of eligible project cost, and eligible for accelerated depreciation (Modified Accelerated Cost Recovery System). | | No Federal tax incentives are available for pool heating projects. |

MORE INFORMATION

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|--|---|--|
| Energy Trust Incentives www.energytrust.org | Oregon Business Energy Tax Credits www.oregon.gov/energy/renew/Solar/Support-BETC.shtml | Federal Tax Credits www.energytaxincentives.org |
|--|---|--|

Energy Trust serves Oregon customers of Portland General Electric, Pacific Power, NW Natural and Cascade Natural Gas. If your business is located outside of these utility service territories, visit www.solaroregon.org/incentives for information on solar incentives available in your area.

Notes: • You must apply to Energy Trust and Oregon Department of Energy before starting your project to be eligible for cash incentives and Business Energy Tax Credits. You will receive your Energy Trust incentive after your project has been installed and inspected. The tax credit can be claimed on your annual tax filing.
• Cash incentives, tax credits and depreciation are subject to change and eligibility criteria. Energy Trust cash incentives for businesses are taxable. Some businesses are unable to claim all tax benefits. Reduction in state tax liability can increase federal tax liability. Consult your tax adviser.



Lucky Labrador Brewing Company, Portland

Lucky Labrador Brewing installed a solar water heating system to preheat water to 160–200 degrees for their brewing process. After receiving an Energy Trust incentive, an Oregon Business Energy Tax Credit and a federal tax credit, the net cost of the system was about \$4,640. Gas savings are expected to be \$1,560 a year.

“We use a lot of water to make beer. The solar water heating system really helps reduce our energy costs and our carbon footprint. It just made sense for economic, ethical and community reasons.”

Gary Geist, co-owner, Lucky Labrador Brewing